Table 1a. Asian Studies Included in EPA Draft Risk
Assessment: Epidemiologic Studies of Lung
Cancer in Nonsmoking Women, with Spousal Smoking Included

Study [site]	Sample Size	Spousal Smoking*	Heating Methods/ Fuel Use	Cooking Tech- Niques	Diet	Other
Hirayama, 1981, 198 [Japan]	91,540	(+)		***		·
Chan and Fung, 1982 [Hong Kong]	223	(-)		Yes		
Lam, 1985 [Hong Kong]	248	(-)		Yes		Home incense burning
Akiba, et al., 1986 [Japan]	1,385	(+)				Radiation exposure
Gao, et al., 1987 [Shanghai]	1,407	(-)		Yes	Yes	Medical history; hormonal factors
Koo, et al., 1987 [Hong Kong]	225	(-)				
Lam, et al., 1987 [Hong Kong]	890	(+) .				,
Geng, et al., 1988 [Tianjin, China]	314	(+)	Yes			Medical history; occupation
Inoue and Hirayama, 1988 [Japan]	83	(+)				

Study [site]	Sample Size	Spousal Smoking*	Heating Methods/ Fuel Use	Cooking Tech- Niques	Diet	Other
Shimizu, et al., 1988 [Japan]	180	(-)	Yes		Yes	Occupation

^{* (+)} indicates a statistically significant relative risk was reported; (-) indicates the reported relative risk was not statistically significant.

Table 1b. Asian Studies Published After EPA Draft Risk Assessment: Epidemiologic Studies of Lung Cancer in Nonsmoking Women, with Spousal Smoking Included

Study [site]	Sample Size	Spousal Smoking*	Heating Methods/ Fuel Use	Cooking Tech- Nigues	Diet	Other
He, et al., 1990 [China]	536 ⁺	(-)	Yes	Yes	400 day	Medical history
Sobue, et al., 1990 [Japan]	639	(-)	Yes			
Wang, et al., 1990 [NE China]	110	(-)	Yes	~~		Indoor and outdoor air pollution
Wu-Williams, et al., 1990 [NE China]	1,924	(+)**	Yes	Yes	Yes	Medical history; occupation
Liu, et al., 1991*** [China]	221	(-)	Yes	Yes		Medical history

^{* (+)} indicates a statistically significant relative risk was reported; (-) indicates the reported risk was not statistically significant.

⁺ Males and females combined.

^{**} The reported relative risk was statistically significantly negative.

^{***}Full report on population discussed in He, et al., abstract.

Table 1c. Ancillary Asian Studies, Not Considered in EPA Draft Risk Assessment

Study [site]	Sample Size	Spousal Smoking	Heating Methods/ Fuel Use	Cooking Tech- Niques	Diet	Other
Koo, et al., 1984 [Hong Kong]	400	No**	din da			
Mumford, et al., 1987 [China]		No	Yes			
Chapman, et al., 1988 [China]	144 ⁺	No	Yes			
Koo, et al., 1988 [Hong Kong]	136	No		***	Yes	Lifestyle variables
Du and Ou, 1990 [China]	1,324	Мо	Yes			
Xu, et al., 1990 [NE China]	1,077	No	Yes	Yes	Yes	Indoor and outdoor air pollution; occupation

^{**} Other questions were asked regarding ETS. + Males and females combined.

A selection of the relevant literature follows. Useful information is highlighted in yellow; problematic statements are highlighted in blue.

REFERENCES

- 1. Rylander, R., "Environmental Tobacco Smoke and Lung Cancer,"

 The New England Journal of Medicine 323(12): 834, 1990.
- 2. Katzenstein, A.W., "An Estimate of Adult Mortality in the United States from Passive Smoking: A Response," <u>Environment</u> <u>International</u> 16: 175-193, 1990.
- 3. Chen, B.H., Hong, C.J., Pandey, M.R. and Smith, K.R., "Indoor Air Pollution in Developing Countries," World Health Statistics Ouarterly 43: 127-138, 1990.
- 4. Anonymous, "Lung Cancer in South China," Oncology Times 7(6): 33, 1986.
 - deSerres, F.J. and Matsushima, T., "Meeting Report: Mutagenesis and Carcinogenesis by Nitropyrenes and Cancer Chemotherapeutics," <u>Mutation Research</u> 164: 3-8, 1986.
- 5. Geng, G.-Y., Liang, T.H., Zhang, A.Y. and Wu, G.L., "On the Relationship Between Smoking and Female Lung Cancer," <u>Smoking and Health 1987</u>, eds. M. Aoki, S. Hisamichi and S. Tominaga (Amsterdam: Excerpta Medica, 1988): 283-285.
- 6. Mumford, J.L., He, X.Z., Chapman, R.S., Cao, S.R., Harris, D.B., Li, X.M., Xian, Y.L., Jiang, W.Z., Xu, C.W., Chuang, J.C., Wilson, W.E. and Cooke, M., "Lung Cancer and Indoor Air Pollution in Xuan Wei, China," <u>Science</u> 235: 217-220, 1987.
- 7. Chapman, R.S., Mumford, J.L., Harris, D.B., He, X., Jiang, W. and Yang, R., "The Epidemiology of Lung Cancer in Xuan Wei, China: Current Progress, Issues and Research Strategies," <a href="https://doi.org/10.1007/nchi.org/10
- 8. Du, Y.-X. and Ou, X.-L., "Indoor Air Pollution and Woman Lung Cancer," <u>Indoor Air '90: Proceedings of the 5th International Conference on Indoor Air Quality and Climate</u>, Toronto, Canada, July 29-August 3, 1990.
- 9. Liu, Z., He, X., and Chapman, R.S., "Smoking and Other Risk Factors for Lung Cancer in Xuanwei, China," <u>International Journal of Epidemiology</u> 20(1): 26-31, 1991.
 - He, X., Chen, W., Liu, Z. and Chapman, R.S., "An Epidemiological Study of Lung Cancer in Xuan Wei County, China: Current Progress," (abstract), presented at the Second Annual Meeting of the International Society for Environmental Epidemiology, Berkeley, California, August 13-15, 1990.

- 11. Wu-Williams, A.H., Dai, X.D., Blot, W., Xu, Z.Y., Sun, X.W., Xiao, H.P., Stone, B.J., Yu, S.F., Feng, Y.P., Ershow, A.G., Sun, J., Fraumeni, J.F. and Henderson, B.E., "Lung Cancer Among Women in North-East China," <u>British Journal of Cancer</u> 62: 982-987, 1990.
- 12. Xu, Z.-Y., Blot, W.J., Xiao, H.-P., Wu, A., Feng, Y.-P., Stone, B.J., Sun, J., Ershow, A.G., Henderson, B.E. and Fraumeni, J.F., "Smoking, Air Pollution, and the High Rates of Lung Cancer in Shenyang, China," <u>Journal of the National Cancer Institute</u> 81: 1800-1806, 1989.
- 13. Shimizu, H., Morishita, M., Mizuno, K., Masuda, T., Ogura, Y., Santo, M., Nishimura, M., Kunishima, K., Karasawa, K., Nishiwaki, K., Yamamoto, M., Hisamichi, S. and Tominaga, S., "A Case-Control Study of Lung Cancer in Nonsmoking Women,"

 Tohoku Journal of Experimental Medicine 154: 389-397, 1988.
- 14. Sobue, T., Suzuki, R., Nakayama, N., Inubuse, C., Matsuda, M., Doi, O., Mori, T., Furuse, K., Fukuoka, M., Yasumitsu, T., Kuwabara, O., Ichigaya, M., Kurata, M., Kuwabara, M., Nakahara, K., Endo, S. and Hattori, S., "Passive Smoking Among Nonsmoking Women and the Relationship Between Indoor Air Pollution and Lung Cancer Incidence -- Results of a Multicenter Case Controlled Study," Gan to Rinsho 36(3): 329-333, 1990 (translation).
- 15. Gao, Y.-T., Blot, W.J., Zheng, W., Ershow, A.G., Hsu, C.W., Levin, L.I., Zhang, R. and Fraumeni, J.F., "Lung Cancer Among Chinese Women," <u>International Journal of Cancer</u> 40: 604-609, 1987.
- 16. Koo, L.C., "Dietary Habits and Lung Cancer Risk Among Chinese Females in Hong Kong Who Never Smoked," <u>Nutrition and Cancer</u> 11: 155-172, 1988.
 - Koo, L.C., Ho, J.H.-C. and Rylander, R., "Life-History Correlates of Environmental Tobacco Smoke: A Study on Nonsmoking Hong Kong Chinese Wives with Smoking Versus Nonsmoking Husbands," <u>Soc Sci Med</u> 26(7): 751-760, 1988.
 - Koo, L.C., "Environmental Tobacco Smoke and Lung Cancer: Is It the Smoke or the Diet?" Present and Future of Indoor Air

- Quality, C.J. Bieva, et al., (eds.), (Amsterdam: Excerpta Medica, 1989): 65-75.
- 17. Tewes, F.J., Koo, L.C., Meisgen, T.J. and Rylander, R., "Lung Cancer Risk and Mutagenicity of Tea," Environmental Research 52: 23-33, 1990.
- 18. Sidney, S., Caan, B.J. and Friedman, G.D., "Dietary Intake of Carotene in Nonsmokers with and Without Passive Smoking at Home," American Journal of Epidemiology 129(6): 1305-1309, 1989.
 - Waller, K.D. and Smith, A.H., "Effects of Socioeconomic Status and Smoking on Serum Beta-Carotene," <u>Archives of Environmental Health</u> 46(2): 120, 1991.
- 19. Holst, P.A., et al., "For Debate: Pet Birds as an Independent Risk Factor for Lung Cancer," <u>British Medical Journal</u> 297: 1319-1321, 1988.